

Abstract

System and method for routing packets for IP telephony. The system includes an IP telephone (IPT) and a Service Gateway (SG) coupled via a network. The SG receives a data packet from the IPT, including a private source IP address (SIPA), source port number (SPN), and destination information for an IP device, performs network address persistent port translation (NAPPT) on the data packet, and sends it to the IP device. NAPPT changes the private SIA to a public SIA, leaving the SPN unchanged. The SG receives a data packet from the IP device, including a public destination IP address (DIPA, i.e., said public SIPA), a destination port number (DPN, i.e., said SPN), and source information, NAPPTs the data packet, using the public DIPA and the DPN to identify the IPT, changing the public DIPA to the private SIPA, leaving the DPN unchanged, and sends the data packet to the IPT.